

RTIP ID# <i>(required)</i> 20110110				
TCWG Consideration Date: June 26, 2012				
Project Description <i>(clearly describe project)</i> <p>The San Bernardino Associated Governments (SANBAG), in coordination with the California Department of Transportation (Caltrans) and the City of Rialto, is proposing to construct a new interchange along State Route (SR-) 210 at Pepper Avenue. Figure 2-1 and Figure 2-2 show the regional vicinity and project location.</p> <p>This proposed project is included in the Southern California Association of Governments (SCAG) 2011 Federal Transportation Improvement Program (FTIP) under project ID 20110110. It is also included in the SCAG) 2008 Regional Transportation Plan Amendment #4 under project ID 4M1007.</p>				
Build Alternative <p>The proposed Build Alternative would construct a new tight diamond interchange along SR-210 at Pepper Avenue (refer to Figure 2-3). The project would provide a freeway access ramp at the four quadrants of the interchange. The eastbound and westbound off-ramps would widen from one lane where the ramps diverge from SR-210 to two lanes at the intersection with Pepper Avenue where a dedicated left turn lane and a dedicated right turn lane would be provided. The eastbound and westbound on-ramps would each include two lanes at the intersection with Pepper Avenue and would taper to one lane prior to merging onto SR-210. At the ramp intersections with Pepper Avenue traffic signals would be installed. A traffic signal would also be installed at the Pepper Avenue/Highland Avenue intersection.</p> <p>Pepper Avenue would be constructed from Highland Avenue to just south of the intersection of Pepper Avenue and the eastbound ramps; a distance of approximately 1,300 feet. This portion of Pepper Avenue would consist of two 12-foot through lanes in each direction with an 8-foot shoulder, curb and gutter, a 6.5-foot setback, and a 5-foot side walk on both sides of the roadway (i.e., northbound and southbound). A dedicated 12-foot left turn lane from northbound Pepper Avenue to the westbound on-ramp and from southbound Pepper Avenue to the eastbound on-ramp would also be constructed. The south end of the project would match the Pepper Avenue Extension that is currently being undertaken by the City.</p> <p>Utilities would be relocated, as needed, to accommodate the new interchange. Best Management Practice (BMP) features that would include modifications to the existing, or the installation of new, water quality control features, would also be included as part of the project. To the fullest extent practicable, BMPs would be designed to convey both stormwater quantity flows and peak flows.</p> <p>No permanent right-of-way acquisition would be required for the proposed Build Alternative, although temporary easements may be required.</p>				
Type of Project: New Interchange				
County: San Bernardino		Narrative Location/Route & Postmiles: State Route 210; PM 19.3/20.1 Caltrans Projects – EA# 44394		
Lead Agency: San Bernardino Associated Governments (SANBAG)				
Contact Person Lisa Poe	Phone# (909) 884-8276	Fax# (909) 885-4407	Email lpoe@sanbag.ca.gov	
Hot Spot Pollutant of Concern <i>(check one or both)</i> PM2.5 <input checked="" type="checkbox"/> PM10 <input checked="" type="checkbox"/>				
Federal Action for which Project-Level PM Conformity is Needed <i>(check appropriate box)</i>				
Categorical Exclusion (NEPA)	<input checked="" type="checkbox"/> EA or Draft EIS	FONSI or Final EIS	PS&E or Construction	Other

Scheduled Date of Federal Action: 2013				
NEPA Delegation – Project Type <i>(check appropriate box)</i>				
Exempt		Section 6004 – Categorical Exemption	✓ Section 6005 – Non- Categorical Exemption	
Current Programming Dates <i>(as appropriate)</i>				
	PE/Environmental	ENG	ROW	CON
Start	2011	2011	2013	2014
End	2013	2013	2014	2016
<p>Project Purpose and Need (Summary): <i>(attach additional sheets as necessary)</i></p> <p>The purpose of the proposed SR-210/Pepper Avenue New Interchange project is to:</p> <ul style="list-style-type: none"> • provide improved regional connectivity to the local transportation network; • provide improved connectivity between SR-210 and Interstate 10 (I-10); and • provide interchange improvements that are consistent with existing local planning documents. <p>Pepper Avenue was planned as an interchange when the SR-210 freeway was originally built, and right-of-way was reserved for the interchange at that time. The Pepper Avenue Interchange is shown as a future interchange in the City's General Plan and Pepper Avenue is also shown in the General Plan as an important north/south truck route.</p> <p>Access between SR-210 and I-10 is restricted at the east end of the City due to the orientation of Lytle Creek. The river runs diagonally across the east end of the City, which results in a limited number of north/south roadways to the east of Acacia Avenue and to the north of Baseline Road. This limits access for both local traffic attempting to access the regional transportation network, and in particular in trying to access SR-210; and for regional connectivity to the local transportation network particularly in the eastern portion of the City. In addition, truck routes have been designated in the City to accommodate the large volumes of truck traffic associated with goods movement. Caltrans has designated two trucks route classes based on California legislation: National Network (NN) and Terminal Access (TA) routes. The truck routes in Rialto are defined as TA routes. These routes are portions of State routes or local roads that can accommodate Surface Transportation Assistance Act (STAA) standard trucks. TA routes allow STAA trucks to: 1) travel between NN routes; 2) reach a truck's operating facility, or 3) reach a facility where freight originates, terminates, or is handled in the transportation process. Within the City, Pepper Avenue is designated as a truck route. This route currently does not provide connectivity to SR-210, which hinders the ability of the route to accommodate the truck traffic and to meet the defined requirements of TA routes. Within the City the next closest north/south designated truck route is Cedar Avenue/Ayala Drive, which is located approximately 2.5 miles to the west. This results in a less direct access route between SR-210 and I-10 for travelers in the City as trucks and other traffic have to follow a more circuitous route to travel between these facilities; increasing the miles travelled particularly for traffic heading east on SR-210.</p>				
<p>Surrounding Land Use/Traffic Generators <i>(especially effect on diesel traffic)</i></p> <p>Land uses surrounding the project area consist of the following:</p> <ul style="list-style-type: none"> • Southwest quadrant - an un-named tributary and its floodplain to the immediate west followed by a park (Frisbie Park) and existing residential development farther to the west and south of the park; • Southeast quadrant – open space containing one abandoned/uninhabitable residence; and • Northern area - sand and gravel quarry on the north side of East Highland Avenue. <p>Click here for Google Map image of project site and surrounding vicinity.</p> <p>The sand and gravel quarry represents the only heavy-truck trip generator within the project vicinity. Trucks currently access this facility via Highland Avenue, with access to SR-210 via State Street to the east or Riverside Drive to the west. The proposed project would allow for direct site access from SR-210, avoiding residential areas located near State Street and Riverside Drive.</p>				

Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

Build Alternative SR-210 Project Limits 2016 AADT Estimate is 31,650, with a 5% truck percentage, or 1,583 Truck AADT.

No-Build Alternative SR-210 Project Limits 2016 AADT Estimate 31,350, with a 5% truck percentage, or 1,568 Truck AADT.

Source: IBI Group, March 2012. *State Route 210/Pepper Avenue Interchange Traffic Impact Analysis*. Prepared for SANBAG.

RTP Horizon Year / Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

Build Alternative SR-210 Project Limits 2036 AADT Estimate 63,525, with a 5% truck percentage, or 3,176 Truck AADT.

No-Build Alternative SR-210 Project Limits 2036 AADT Estimate 62,100, with a 5% truck percentage, or 3,105 Truck AADT.

Source: IBI Group, March 2012. *State Route 210/Pepper Avenue Interchange Traffic Impact Analysis*. Prepared for SANBAG.

Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

Pepper Avenue at State Route 210 On/Off Ramps (Tight Diamond Interchange) Year 2016 Traffic Volumes

	Eastbound		Westbound		Northbound		Southbound	
	No-Build	Build	No-Build	Build	No-Build	Build	No-Build	Build
Eastbound Ramps								
AADT	-	1,225	-	-	331	1,456	394	1,188
Truck Percentage	-	8%	-	-	8%	8%	8%	8%
Truck AADT	-	98	-	-	27	117	32	95
Westbound Ramps								
AADT	-	-	-	1,613	331	1,419	394	825
Truck Percentage	-	-	-	8%	8%	8%	8%	8%
Truck AADT	-	-	-	129	27	114	32	66

Adapted from: IBI Group, March 2012. *State Route 210/Pepper Avenue Interchange Traffic Impact Analysis*. Prepared for SANBAG.
AADT volumes estimated based on assumption that peak-hour volumes presented in Traffic Impact Analysis represent 16% AADT.

RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

Pepper Avenue at State Route 210 On/Off Ramps (Tight Diamond Interchange) Year 2036 Traffic Volumes

	Eastbound		Westbound		Northbound		Southbound	
	No-Build	Build	No-Build	Build	No-Build	Build	No-Build	Build
Eastbound Ramps								
AADT	-	6,075	-	-	1,450	7,031	1,713	5,606
Truck Percentage	-	8%	-	-	8%	8%	8%	8%
Truck AADT	-	486	-	-	116	563	137	449
Westbound Ramps								
AADT	-	-	-	8,038	1,450	6,825	1,713	3,894
Truck Percentage	-	-	-	8%	8%	8%	8%	8%
Truck AADT	-	-	-	643	116	546	137	312

Adapted from: IBI Group, March 2012. *State Route 210/Pepper Avenue Interchange Traffic Impact Analysis*. Prepared for SANBAG.
AADT volumes estimated based on assumption that peak-hour volumes presented in Traffic Impact Analysis represent 16% AADT.

Describe potential traffic redistribution effects of congestion relief (impact on other facilities)

As detailed above under *Purpose and Need*, Within the City of Rialto, Pepper Avenue is designated as a truck route. This route currently does not provide connectivity to SR-210, which hinders the ability of the route to accommodate the truck traffic and to meet the defined requirements of TA routes. Within the City the next closest north/south designated truck route is Cedar Avenue/Ayala Drive, which is located approximately 2.5 miles to the west. This results in a less direct access route between SR-210 and I-10 for travelers in the City as trucks and other traffic have to follow a more circuitous route to travel between these facilities; increasing the miles travelled particularly for traffic heading east on SR-210.

Comments/Explanation/Details *(attach additional sheets as necessary)*

The proposed project is within a nonattainment area for federal PM_{2.5} and PM₁₀ standards. Therefore, per 40 CFR Part 93, analyses are required for conformity purposes. However, the EPA does not require hotspot analyses, qualitative or quantitative, for projects that are not listed in section 93.123(b)(1) as an air quality concern. The project does not qualify as a project of air quality concern (POAQC) because of the following reasons:

- The proposed project is not a new or expanded highway project. As previously noted, Pepper Avenue was planned as an interchange when the SR-210 freeway was originally built, and right-of-way was reserved for the interchange at that time. The Pepper Avenue Interchange is shown as a future interchange in the City of Rialto's General Plan.
- The LOS conditions in the project vicinity with and without the proposed project are shown in Tables 3-12 through 3-15 (see attached). As shown therein, the proposed project would result in overall improvements in LOS. At horizon year 2036, all project vicinity intersections are predicted to operate at LOS C or better.
- The proposed project does not include the construction of a new bus or rail terminal.
- The proposed project does not expand an existing bus or rail terminal.
- The proposed project is not in or affecting locations, areas, or categories of sites that are identified in the PM_{2.5} and PM₁₀ applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.

Therefore, the proposed project meets the CAA requirements and 40 CFR 93.116 without any explicit hot-spot analysis. The proposed project would not create a new, or worsen an existing, PM₁₀ or PM_{2.5} violation.



**Figure 2-1
Project Vicinity Map
State Route 210/Pepper Avenue New Interchange Project**



Figure 2-2
Project Location Map
State Route 210/Pepper Avenue New Interchange Project

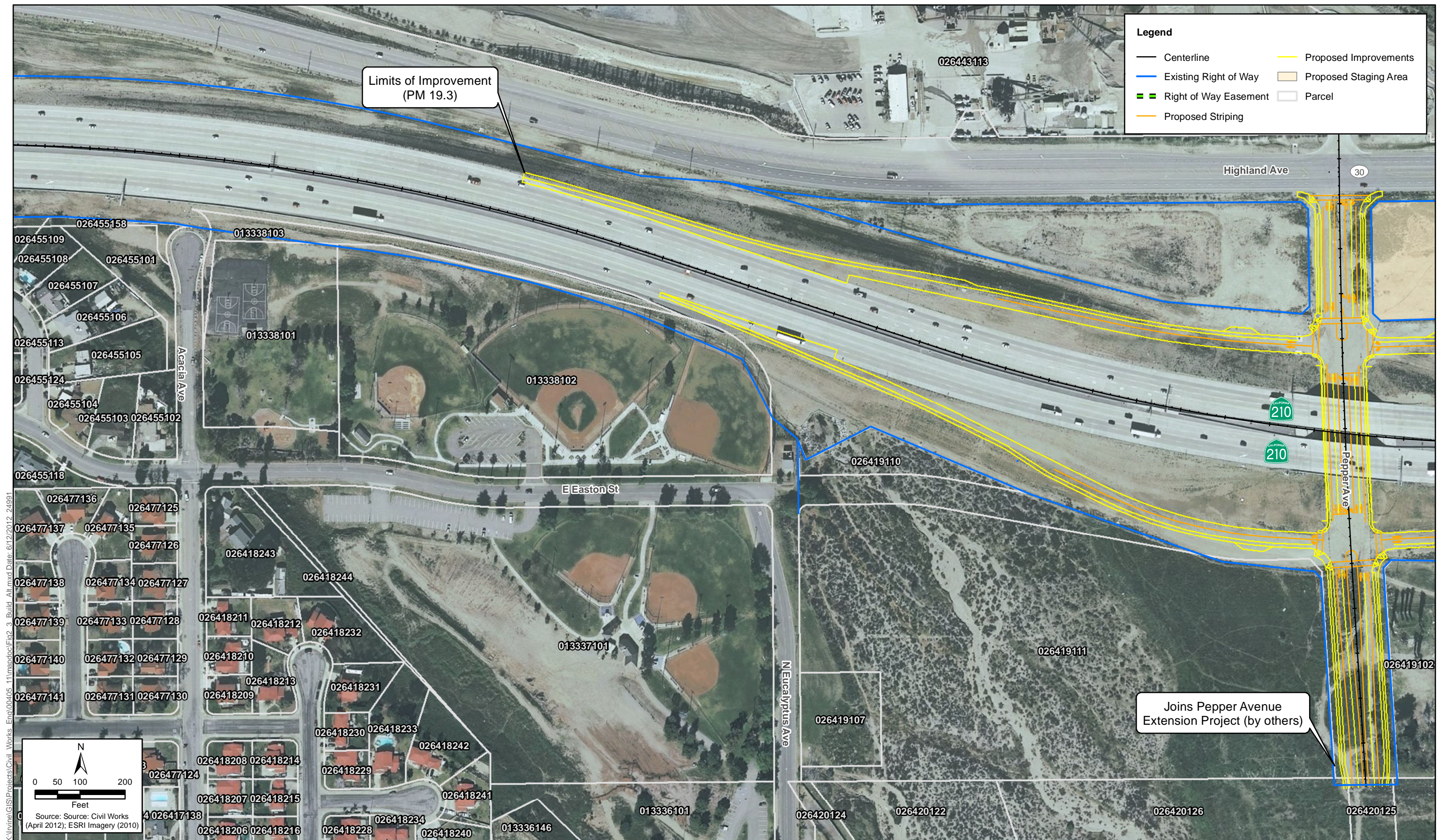


Figure 2-3 - Sheet 1
Build Alternative
State Route 210/Pepper Avenue New Interchange Project

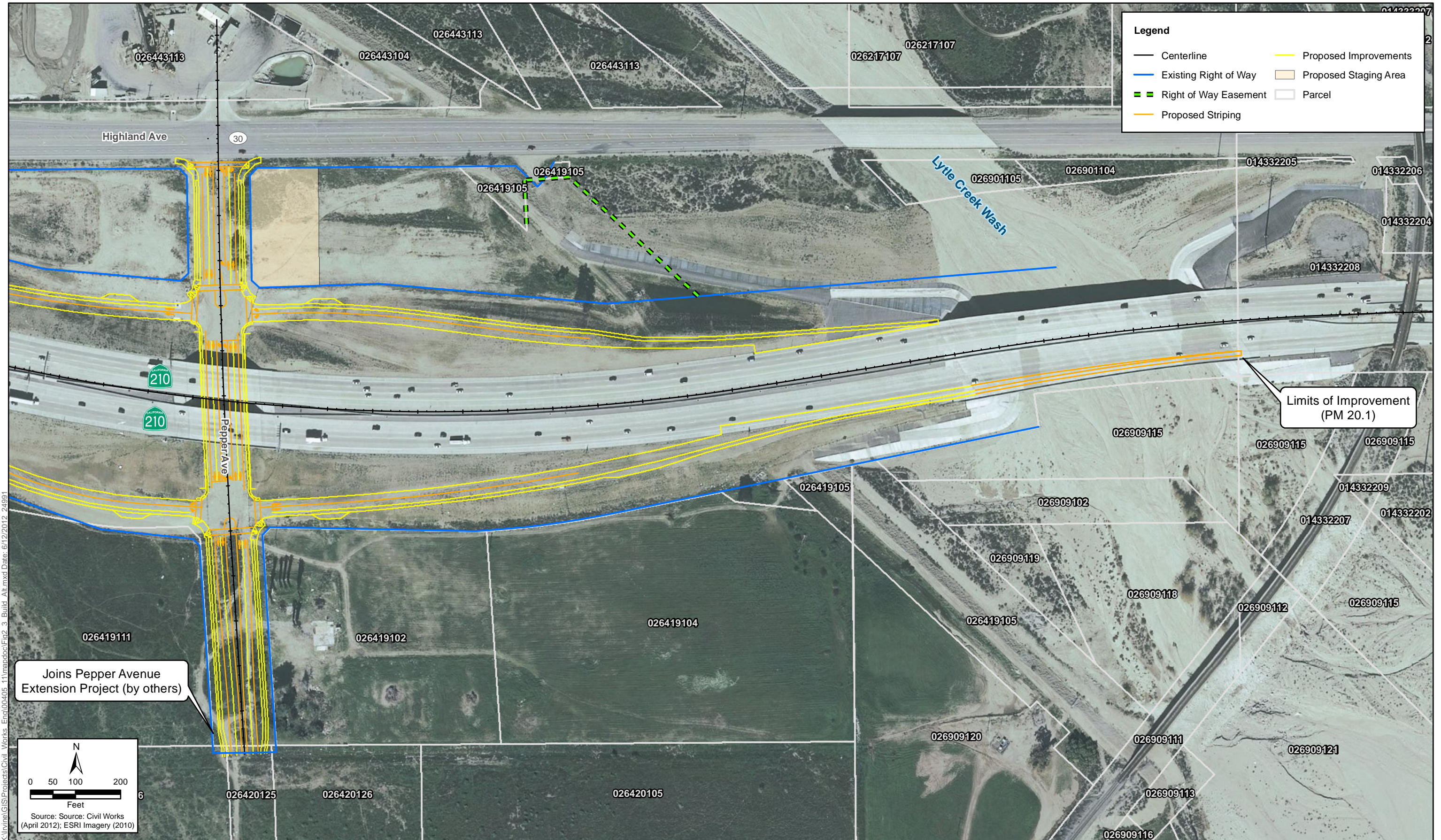


Figure 2-3 - Sheet 2
Build Alternative
State Route 210/Pepper Avenue New Interchange Project

STATE ROUTE 210/PEPPER AVENUE INTERCHANGE – TRAFFIC IMPACT ANALYSIS

E. Level of Service (LOS) and Warrant Analyses

This sections includes the results of the intersection level of service, queuing, ramp level of service, freeway mainline and HOV lane level of service, weaving and signal warrant analyses for existing, future without project and future with project conditions.

INTERSECTION LEVEL OF SERVICE ANALYSIS

A summary of the AM and PM peak hour level of service (LOS) analysis results for the Existing Year (2011) conditions are included in Table 3-11. All existing study intersections currently operate at LOS B or above during both peak hour time periods.

Table 3-11: Existing Year (2011) Level of Service Results

#	Intersection	Signal	AM Peak Hour		PM Peak Hour	
			Delay (sec)	LOS	Delay (sec)	LOS
1	Riverside Avenue and SR-210 WB Ramps	Signalized	18.1	B	13.9	B
2	Riverside Avenue and SR-210 EB Ramps	Signalized	15.8	B	12.9	B
3	Pepper Avenue and Highland Avenue	Unsignalized	0.3	A	0.2	A
4	Pepper Avenue and SR-210 WB Ramps	Signalized	n/a		n/a	
5	Pepper Avenue and SR-210 EB Ramps	Signalized	n/a		n/a	
6	State Street and SR-210 WB Ramps	Signalized	11.5	B	10.6	B
7	State Street and SR-210 EB Ramps	Signalized	15.0	B	18.1	B

The Opening Year (2016) AM peak hour level of service analysis results for the No Project and With Project scenarios are summarized in Table 3-12. The PM peak hour results are presented in Table 3-13. In the With Project condition, some traffic is diverted off of the Riverside Avenue and State Street ramps and onto the Pepper Avenue interchange, which results in improved operations on the existing facilities. All study intersections are forecast to operate at LOS C or better during all analysis scenarios. There are no significant impacts associated with the proposed project in the Opening Year.

Table 3-12: Opening Year (2016) LOS Results – AM Peak Hour

#	Intersection	Signal	No Project		With Project		Change in Delay
			Delay (sec)	LOS	Delay (sec)	LOS	
1	Riverside Avenue and SR-210 WB Ramps	Signalized	19.6	B	17.6	B	-2.0
2	Riverside Avenue and SR-210 EB Ramps	Signalized	16.1	B	15.9	B	-0.2
3	Pepper Avenue and Highland	Signalized	11.0	B	15.5	B	4.5
4	Pepper Avenue and SR-210 WB Ramps	Signalized	n/a		12.5	B	n/a
5	Pepper Avenue and SR-210 EB Ramps	Signalized	n/a		9.5	A	n/a
6	State Street and SR-210 WB Ramps	Signalized	11.4	B	11.0	B	-0.4
7	State Street and SR-210 EB Ramps	Signalized	16.7	B	16.8	B	0.1

STATE ROUTE 210/PEPPER AVENUE INTERCHANGE – TRAFFIC IMPACT ANALYSIS

Table 3-13: Opening Year (2016) LOS Results – PM Peak Hour

#	Intersection	Signal	No Project		With Project		Change in Delay
			Delay (sec)	LOS	Delay (sec)	LOS	
1	Riverside Avenue and SR-210 WB Ramps	Signalized	15.8	B	15.0	B	-0.8
2	Riverside Avenue and SR-210 EB Ramps	Signalized	14.2	B	13.9	B	-0.3
3	Pepper Avenue and Highland	Signalized	9.6	A	15.1	B	5.5
4	Pepper Avenue and SR-210 WB Ramps	Signalized	n/a		12.5	B	n/a
5	Pepper Avenue and SR-210 EB Ramps	Signalized	n/a		10.5	B	n/a
6	State Street and SR-210 WB Ramps	Signalized	11.4	B	11.2	B	-0.2
7	State Street and SR-210 EB Ramps	Signalized	18.6	B	18.5	B	-0.1

The Horizon Year (2036) peak hour level of service analysis results for the No Project and With Project scenarios are summarized in Tables 3-14 and 3-15. All study intersections are forecast to operate at LOS C or better during all analysis scenarios. There are no significant impacts associated with the proposed project in the Horizon Year.

Table 3-14: Horizon Year (2036) LOS Results – AM Peak Hour

#	Intersection	Signal	No Project		With Project		Change in Delay
			Delay (sec)	LOS	Delay (sec)	LOS	
1	Riverside Avenue and SR-210 WB Ramps	Signalized	24.1	C	17.8	B	-6.3
2	Riverside Avenue and SR-210 EB Ramps	Signalized	18.8	B	16.3	B	-2.5
3	Pepper Avenue and Highland	Signalized	9.1	A	16.9	B	7.8
4	Pepper Avenue and SR-210 WB Ramps	Signalized	n/a		15.4	B	n/a
5	Pepper Avenue and SR-210 EB Ramps	Signalized	n/a		12.0	B	n/a
6	State Street and SR-210 WB Ramps	Signalized	13.0	B	11.5	B	-1.5
7	State Street and SR-210 EB Ramps	Signalized	15.8	B	16.0	B	0.2

Table 3-15: Horizon Year (2036) LOS Results – PM Peak Hour

#	Intersection	Signal	No Project		With Project		Change in Delay
			Delay (sec)	LOS	Delay (sec)	LOS	
1	Riverside Avenue and SR-210 WB Ramps	Signalized	28.2	C	15.1	B	-13.1
2	Riverside Avenue and SR-210 EB Ramps	Signalized	20.2	C	15.2	B	-5.0
3	Pepper Avenue and Highland	Signalized	9.1	A	19.0	B	9.9
4	Pepper Avenue and SR-210 WB Ramps	Signalized	n/a		19.8	B	n/a
5	Pepper Avenue and SR-210 EB Ramps	Signalized	n/a		16.6	B	n/a
6	State Street and SR-210 WB Ramps	Signalized	15.9	B	14.8	B	-1.1
7	State Street and SR-210 EB Ramps	Signalized	20.8	C	22.1	C	1.3